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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,952	09/25/2003	Roland L. Schafer JR.	7784-000609	7068

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EXAMINER
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HOLZEN, STEPHEN A

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/670,952

Applicant(s)

SCHAFER ET AL.

Examiner

Stephen A. Holzen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 1/21/2005 have been fully considered but they are not persuasive. Specifically the applicant has argued that White does not disclose a switching module controlled by the controller. The applicant seems to be alluding to the fact that White uses a Network Hub for re-configuring the data network.

White discloses a communication networks hub that facilitates centralized testing and reconfiguration of a data network when necessary. In fact White is essentially silent with respect to how signals are routed and how the controller controls the signal switching. The examiner asserts that a switching module controlled by a controller is a necessary component of an autopilot (avionics computer; Col. 1, lines 45-46).

The applicant's amendments have necessitated a new rejection over the same art.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

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Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 4-14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by White, III (6,561,454).

Re – Claims 1 and 10: White discloses a cabin services system for use with mobile platforms the cabin services system comprising:

- a plurality of subsystems (network devices) including configuration data used to provide one or more operations of each subsystem within a cabin of the mobile platform,

- a controller (avionics computer, Col. 1, lines 45-46) for outputting signals operative with the configuration data of each subsystem to control the one or more operations of each subsystem (necessary that a controller for controlling network devices would output data such that the subsystems would be properly operated thereby),

- at least one switching module controlled by the controller for routing signals between the controller and each subsystem and between the subsystems (a necessary component of an autopilot, "avionics computer") and

- a plurality of data busses communicatively interconnecting the subsystems to the switching module and the switching module to the controller,

(data is transmitted via a data bus, see Figure 2) wherein all the data busses are the same type of local area network cable (see Figure 2).

Re – Claims 4-14, 16 and 17: White further discloses programmable modules (network devices are programmable) associated with the subsystems (see col. 2, lines 50-60), a controller is configured to control the one or more operations using the programmable modules (avionics computer), where the network devices control audio operations (communications devices), where the crew can interface with the subsystems (inherent that crew interacts with aircraft system control). A lookup table (i.e. a data structure) is most commonly used to replace a runtime computation with a simpler lookup operation. The speed gain can be significant, since retrieving a value from memory is often faster than undergoing an expensive computation. It is inherent that the software used in the controllers of White use look up tables because they are the preferred method of electronic computations.

4. Claims 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by White. White discloses connecting modules (network devices) to at least one switching modules (signal switches are an inherent part of a autopilot, see avionic computer) via one or more local area network cables (cables are a necessary means to route signals see Figure 2), each programmable module including configuration data used to provide an operation of a related one of a plurality of mobile platform subsystem (necessary that network device have configuration data to operate the system they are designed to

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operate) connecting the switching modules to a controller adapted to output control signals operative with the configuration data to provide the operation of the mobile platform subsystem (a necessary structure for an autopilot), receiving a command signal, selectively activating the programmable modules, via the switching modules, determining control commands for controlling the programmable modules using a lookup table stored in the programmable modules (see rejection above where the examiner explained his position in regards to this limitation), wherein the programmable modules are configured to control operation of the audio subsystem (communications system).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of ordinary skill in the art. White discloses every aspect of the present invention except wherein all the busses comprise IEEE 10/100 Base T Ethernet Cables. White however discloses that it would be known to use physical network transmission media, and one of ordinary skill in the art knows that 10/100 Base T Ethernet cables are an efficient means for communicating signals and connecting network devices (see [www.bitpipe.com](http://www.bitpipe.com)). It would have been obvious to one having

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ordinary skill in the art at the time the invention was made to use 10/100 Base T Ethernet cable for the purpose of increasing signal transmission efficiency.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 8:00-5:00. After April 4<sup>th</sup> the examiner can be reached on 571-272-6903.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703-305-7421. After April 4<sup>th</sup>, Mrs. Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sah



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